



Patent Application  
Attorney Docket No. PC10805B US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: William J. Curatolo, et al. :

APPLICATION NO.: 10/688,142 : Examiner: Berko, Retford O.

FILING DATE: October 17, 2003 : Group Art Unit: 1615

TITLE: METHOD OF INCREASING THE  
BIOAVAILABILITY AND TISSUE  
PENETRATION OF AZITHROMYCIN

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER RULE §132

I, Steven C. Sutton, declare that:

1. I am a Pfizer Research Fellow and Head of the BioPharmaceutics Group in the Pharmaceutical R&D Dept., Global R&D, Groton, CT.
2. I received my Bachelor of Science degree in pharmacy from the Massachusetts College of Pharmacy and a PhD in Pharmaceutical Sciences at the State University of New York at Buffalo. Prior to joining Pfizer in 1992, I contributed to biopharmaceutic research programs at CIBA-Geigy from 1983 to 1986 and at INTERx Research Labs/MSDRL from 1986 to 1992. My current research interests include solving oral absorption limitations of drug candidates, physiologic/pharmacokinetic computer modelling, and IVIVC.
3. I was a founding member of the AAPS Hudson Valley and AAPS Kansas City Pharmaceutics Discussion Groups and the AAPS Oral Absorption Focus Group. I have also chaired the AAPS Midwest Regional Meeting and was the AAPS representative on the Biopharmaceutics Classification System Expert Panel. Furthermore, I have authored or co-authored over 70 articles, book chapters, abstracts of work in progress, invited presentations and patents and I am an AAPS Research Fellow.

4. I have supervised the following comparative studies on the pharmaceutical effects of orally administered azithromycin alone (control) and the azithromycin-pluronic L61 combination.

5. Groups of at least four fasted, male beagle dogs, were administered azithromycin alone or azithromycin-pluronic L61 combination. The dogs were kept in metabolism cages with free access to water. They were fed normal rations of dry dog food after the eight hour sampling point. Whole blood samples were withdrawn from the jugular vein and the serum was extracted and transferred to cryogenic tubes for analysis of azithromycin content. Concentrations below the lower limit of quantitation (LLOQ, 10 ng/mL) were assumed to be 0 ng/mL and used in the calculation of mean and SD. All pharmacokinetic analyses were carried out using Kinetica (Version 4, Thermo Electron Corp) or WinNonlin Professional (Version 3.2, Pharsight Inc.).

6. The testing results are shown in the following table:

Pluronic L-61 (mg)	AUC <sub>0-24</sub> (ug·hr/ml)	Ratio
0 (control)	1.05	---
25	2.32	2.21
50	3.64	3.40
100	3.21	3.00
200	2.9	2.71

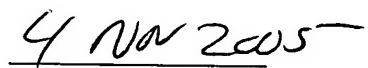
It was found that the presence of pluronic L61 increased the beagle dog's exposure to azithromycin by 121-240% as measured by jugular AUC<sub>0-24</sub>.

7. It is my opinion that the presence of pluronic L61 created superior azithromycin-absorbing-property by beagle dogs. I was told that such superior property is an indication that the claimed azithromycin-pluronic L61 combination is nonobvious over the cited prior art references.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the Untied States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



STEVEN C. SUTTON



DATE